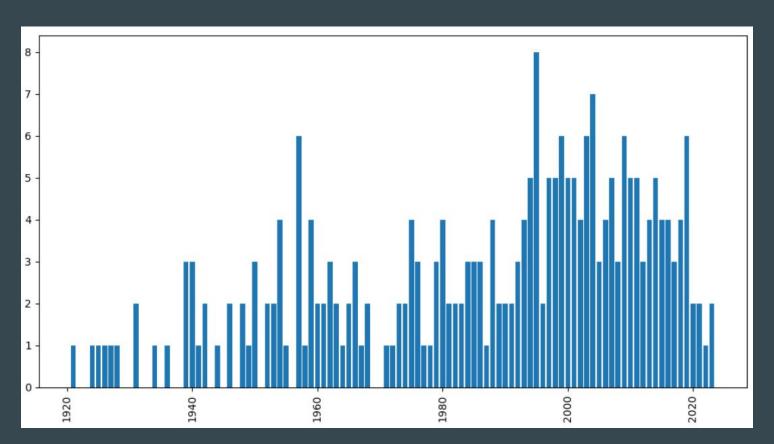
Web Scraping on IMDb

Analyzing the relationship of the actors from the **top 250 movies**

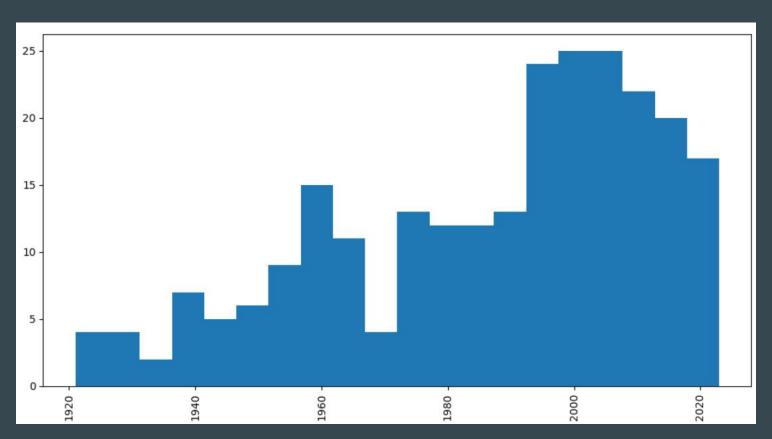
•••

Éliás Gergely

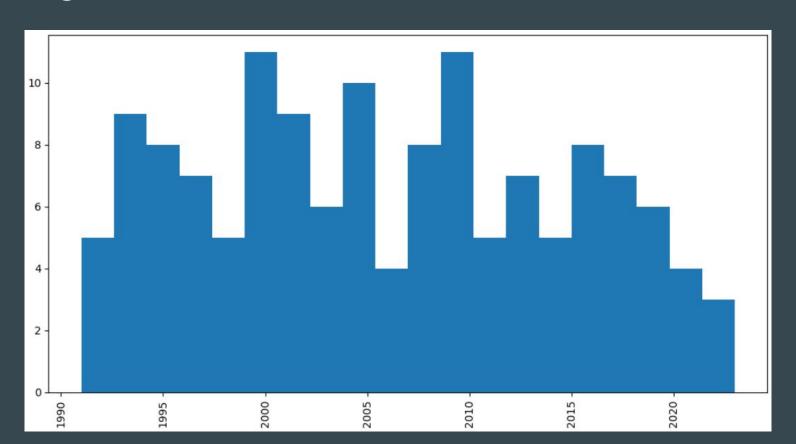
Bar chart of the number of movies by release year



Histogram of the number of movies by release year



Histogram of the number of movies by release year after 1990



result_df.head(20)

	Pair	Cour
0	(Takashi Shimura, Minoru Chiaki)	- 3
1	(Charles Chaplin, Henry Bergman)	
2	(Toshirô Mifune, Takashi Shimura)	
3	(Robert De Niro, Joe Pesci)	
4	(Christian Bale, Michael Caine)	
5	(Orlando Bloom, Cate Blanchett)	
6	(Toshirô Mifune, Eijirô Tôno)	
7	(Christian Bale, Morgan Freeman)	
8	(Christian Bale, Gary Oldman)	
9	(Orlando Bloom, Billy Boyd)	
10	(Carrie Fisher, David Prowse)	
11	(Orlando Bloom, Sean Astin)	
12	(Toshirô Mifune, Minoru Chiaki)	
13	(Harrison Ford, Alec Guinness)	
14	(Toshirô Mifune, Daisuke Katô)	
15	(Harrison Ford, Kenny Baker)	
16	(Harrison Ford, Peter Mayhew)	
17	(Carrie Fisher, Anthony Daniels)	
18	(Carrie Fisher, Peter Mayhew)	
19	(Takashi Shimura, Kamatari Fujiwara)	

Analysis of the actor pairs in the top 250 movies

There are only 5 pairs of actors who have acted together in 4 of the IMDb top 250 movies.

There are 51 pairs who have acted together in 3 movies.

Looking at the first 20 rows of the result, it is suspicious that many of these may be from sequels. For example Orlando Bloom is in this list with Cate Blanchett, with Billy Boyd and also with Sean Astin and that must be because of the Lord of the Rings trilogy.

Analysis of the actor trios in the top 250 movies

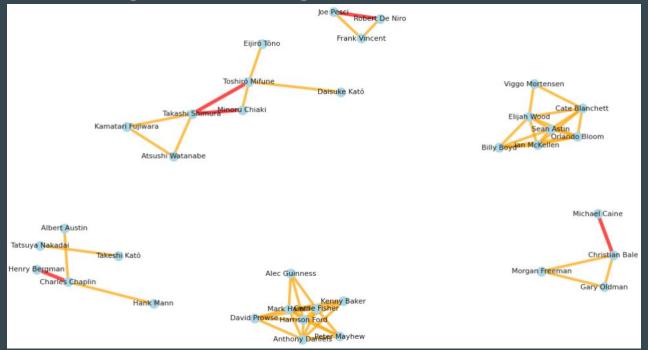
3.V3	Trio	Count
0	(Harrison Ford, Carrie Fisher, Alec Guinness)	3
1	(Mark Hamill, Carrie Fisher, David Prowse)	3
2	(Elijah Wood, Ian McKellen, Cate Blanchett)	3
3	(Ian McKellen, Sean Astin, Cate Blanchett)	3
4	(Elijah Wood, Orlando Bloom, Sean Astin)	3
5	(Elijah Wood, Orlando Bloom, Billy Boyd)	3
6	(Ian McKellen, Sean Astin, Billy Boyd)	3
7	(Elijah Wood, Orlando Bloom, Cate Blanchett)	3
В	(Elijah Wood, Viggo Mortensen, Cate Blanchett)	3
9	(Toshirô Mifune, Takashi Shimura, Minoru Chiaki)	3
0	(Mark Hamill, Anthony Daniels, Kenny Baker)	3
1	(Mark Hamill, Anthony Daniels, Peter Mayhew)	3
2	(Mark Hamill, Anthony Daniels, David Prowse)	3
3	(Mark Hamill, Carrie Fisher, Alec Guinness)	3
4	(Mark Hamill, Carrie Fisher, Kenny Baker)	3

```
result_trio_df[result_trio_df['Count'] == 3].count()[['Count']]
Count     46
dtype: int64
```

There are 46 trios of actors who have worked together in 3 of the IMDb top 250 movies.

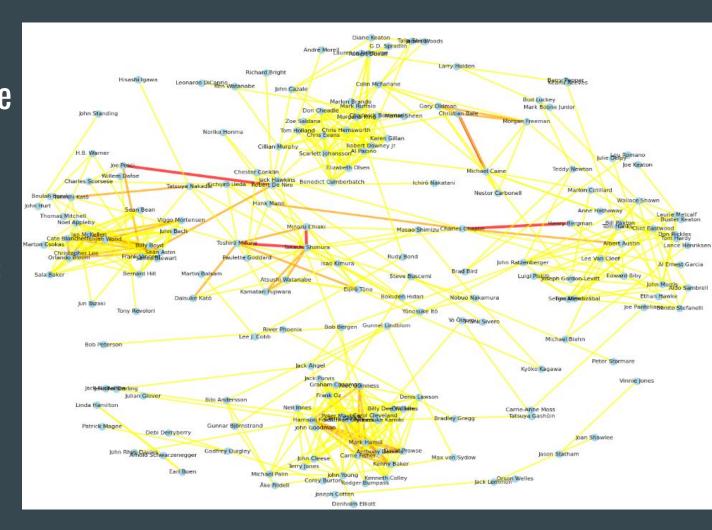
Most of these came also from sequels, probably from the original Star Wars trilogy and the Lord of the Rings trilogy.

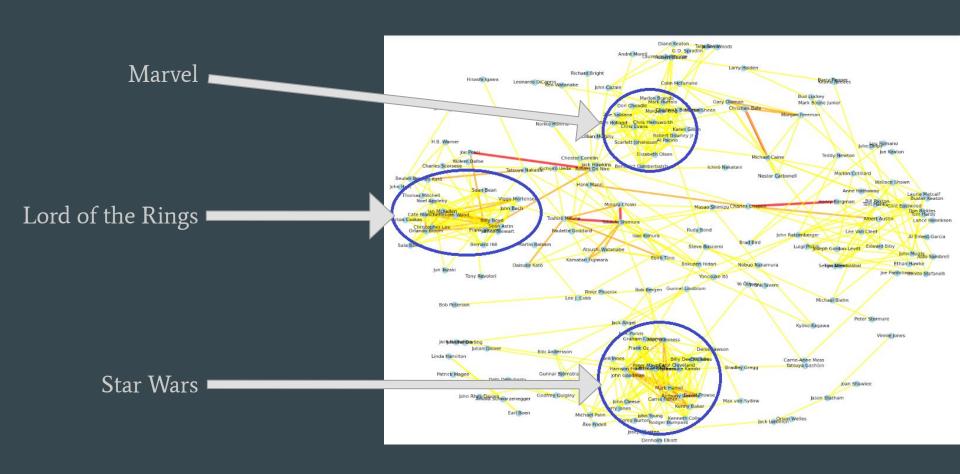
Visualization of the actor pairs who appeared in more than two movies together - orange: 3 movies, red: 4 movies



*This graph only shows the connections where there are more than 2 movies together

Visualization of the actor pairs who appeared in more than one movies together - yellow: 2 movies, orange: 3 movies, red: 4 movies





Conclusion

Most of the actors who have worked together on more than one imdb top 250 film have worked on sequels.

Therefore, the larger nodes on the graph were formed due to the sequels, mostly due to the original Star Wars trilogy, the Lord of the Rings trilogy and the movies of the Marvel Cinematic Universe. Christian Bale, Michael Caine, Morgan Freeman and Gary Oldman were also working together on a trilogy, specifically Christopher Nolan's Batman films.

For further developments of this analysis it would be useful and interesting to treat these movies as one. The result would be a lot different.

But for example Robert De Niro, Joe Pesci and Frank Vincent are not in any sequel together, the common point in their joint films is the director, Martin Scorsese.